CONFERENCE ON DISARMAMENT

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FINAL RECORD OF THE FIVE HUNDRED AND SIXTY-SECOND PLENARY MEETING

Held at the Palais des Nations, Geneva,
on Thursday, 5 July 1990, at 10 a.m.

President: Mr. Boqumil Sujka (Poland)

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The PRESIDENT: I declare open the 562nd plenary meeting of the Conference on Disarmament.

In conformity with its programme of work, the Conference continues today its consideration of agenda item 5, "Prevention of an arms race in outer space". In accordance with rule 30 of its rules of procedure, however, any member wishing to do so may raise any subject relevant to the work of the Conference.

I have on my list of speakers today the representatives of Norway and Finland.

I now give the floor to the representative of Norway, Ambassador Vaernø.

Mr. VAERNØ (Norway): Mr. President, first of all let me congratulate you on your assumption of the presidency of this Conference for the month of July. We are certainly confident that your diplomatic skill and experience will guarantee efficient leadership of our negotiations during this month.

I have asked for the floor today in order to present two working papers. The first paper deals with verification of alleged use of chemical weapons and is based on research carried out by the Division for Environmental Toxicology at the Norwegian Defence Research Establishment, while the other paper summarizes the results of an international symposium on seismological aspects of nuclear test ban verification, which was held in Norway earlier this year.

The first working paper (CD/1008-CD/CW/WP.298), on verification of alleged use of chemical weapons, gives a summary of this year's research report. It represents a continuation of the work being carried out at the Norwegian Defence Research Establishment on this subject since 1981 and reported to the Conference on Disarmament in annual reports. During the current year, the Defence Research Establishment conducted an investigation to optimize the sample preparation method referred to as sorbent extraction. The aim of the investigation was to find a general procedure which can be used for screening samples suspected of being contaminated with chemical warfare agents.

The sorbent extraction technique is based on the principle of absorption of chemical compounds from an aqueous solution passed through a cartridge containing a polymer sorbent. With this technique the chemical agents are retained on the sorbent. This procedure has the advantages of not requiring advanced laboratory equipment and of being executable in the field close to a contaminated area. The sample is concentrated on a cartridge, thus reducing the quantity of material which has to be transported back to the laboratory and also making it easy to handle.

There are several factors which may affect the efficiency of sorbent extraction used in verification of alleged use of chemical weapons. In this report different non-polar sorbents have been tested to find which is most efficient in retaining the chemical warfare agents tabun, sarin, soman, VX, mustard gas and some related phosphorous compounds from aqueous solutions.

(Mr. Vareng, Norway)

Both the amount of sorbent and the sample volume have been examined to find the optimal combination. Another factor which I would like to stress in particular is the temperature conditions for the samples, both during storage and transport. This has been studied to find the requirements needed to prevent degradation of the chemical warfare agents and thereby increase the possibility for a reliable verification.

The second working paper I have the honour to introduce today gives a summary of the results of the International Workshop on Seismological Aspects of Nuclear Test Ban Verification which was held in Norway in February of this year. A total of 76 scientists and representatives from 21 countries participated in the Workshop. The working paper is contained in document CD/1010.

The main theme of the Workshop was the role of regional seismic arrays in a test ban monitoring context. The participants were given an introduction to the two arrays of this type installed in Norway, NORESS and ARCESS, and they also attended a demonstration of the associated computer processing and data analysis facilities.

During a three-day scientific symposium, a total of 30 research papers were presented, addressing many of the outstanding problems and the state-of-the-art in seismic monitoring. In particular, several presentations focused on results using NORESS and ARCESS data, and the excellent capabilities of these arrays were clearly documented. A summary of the contributions is annexed to the working paper, and complete proceedings will be distributed to participants in the Group of Scientific Experts (GSE) later this year.

At the time the Workshop took place, GSE was in the process of conducting its first preparatory data exchanges for its ongoing technical test, GSETT-2. We are encouraged by the results achieved so far during this test, as reported in the progress report from the twenty-ninth session of the GSE. We hope that at its forthcoming thirtieth session GSE will be able to report on further progress in this important undertaking.

Norway is participating in GSETT-2 by contributing seismic data from both the NORESS and ARCESS regional arrays. In this connection I would like to recall Norway's earlier proposal to the Conference on Disarmament contained in document CD/714, that the NORESS/ARCESS array concept could serve as standard for seismic stations within the global network as envisaged by GSE. We are confident that the results from GSETT-2 will confirm the important contributions that arrays of this type can make within such a future global network.

The PRESIDENT: I thank the representative of Norway for his statement and for the kind words he addressed to the Chair.

I now give the floor to the representative of Finland, Mrs. Rautio.

Mrs. RAUTIO (Finland): I have asked for the floor to introduce the latest Blue Book, which has been circulated and will be issued as a CD document (CD/1009). Rather than being a totally Finnish contribution to the Conference on Disarmament, the 1990 Blue Book presents a detailed description of the results of an interlaboratory comparison (round-robin) test of which a working paper (CD/CW/WP.288) has already been circulated jointly by Australia, Canada, Finland, France, the Federal Republic of Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom.

The aim of the exercise was to test existing procedures for sample preparation and analysis and to determine whether standard operating procedures would be required for the future Convention. It was not the intention of the exercise to choose laboratories for verification purposes as this will be the task of the Preparatory Commission.

Each laboratory received similar air and soil samples. The laboratories were free to choose their own methods for sample preparation and analysis, on the condition that all methods and instruments should be described in detail. The main objective was to identify agents and their degradation products qualitatively. After all laboratories had reported their findings the laboratory which had prepared the samples provided details of sample preparation, spiking chemicals and their concentrations in the samples. The experimental details of the test were discussed by the analysts in a meeting at the end of March. Before publication the draft of the Blue Book was sent to the participating laboratories for review.

All participating laboratories considered the round-robin test very useful. The samples were planned in such a way that the capability and skill of the laboratories would be demonstrated. The test showed the importance of proper handling of the samples during transport and in the laboratory before the samples are prepared for analysis. Sample-preparation is the most important step in the whole analytical procedure. Mistakes during sample-preparation cannot be corrected later on and thus they could jeopardize the final results. The exercise also clearly demonstrated the potential of the present analytical methods. It showed the value of chromatographic methods for screening purposes and the feasibility of obtaining unambiguous identification of chemical warfare agents in environmental samples by two independent spectrometric methods.

In the present report the term "Standard Operating Procedure" has been revised to "Recommended Operating Procedure" in order not to discourage laboratories from developing new and better methods.

Chapters 2 to 5 of the report comprise descriptions of the procedures used by the laboratories and relevant conclusions from the test are drawn in chapter 6. Chapter 7 presents the Recommended Operating Procedures as discussed by the analysts. However, as the time was too short to allow agreement of details of the procedures, some of them may reflect the views of the Finnish laboratory only and we acknowledge full responsibility for that. These procedures should be regarded as a basis for further discussions following the second round-robin test and not as the ultimate recommended procedures.

(Mrs. Rautio, Finland)

The Finnish CW-Project has drawn from this experiment the conclusion that continuous method development for sampling, sample-preparation, and analysis during the forthcoming years of the chemical weapons convention will be important to the success of the implementation of the convention. This analytical field cannot afford to stand aside from the research and development which lies at the very heart of science. Accordingly, method development will be one principal task of the future verification laboratories supporting the implementation of the convention. We nevertheless believe that the methods actually used for verification analyses will have to be approved by the Technical Secretariat in order to create confidence among States Parties that the results of the analyses do not vary from one laboratory to another. Recommended Operating Procedures, tested by all verification laboratories, could be used as the first choice in the analysis. In addition to the approved methods, the laboratories may well use methods they themselves have developed and found superior to the approved ones. Such new methods could, after due evaluation and testing, become Recommended Procedures. This approach would encourage the laboratories to improve their own methods with a view to getting them accepted as Recommended Procedures.

This principle of continuous development means that the future Technical Secretariat has to arrange the testing of new methods and get them approved as soon as possible. The merits of such testing are clearly demonstrated in the present round-robin test.

A compilation of Recommended Procedures would be invaluable to laboratories of countries without long experience in the analysis of chemical warfare agents but which should be able to acquire necessary technical competence to do verification analyses. This is important for the National Authorities for the implementation of the future convention and would also facilitate participation in the international verification as a designated laboratory. In this way recommended procedures could support wider geographical distribution of designated laboratories and universal adherence to the convention.

The PRESIDENT: That concludes my list of speakers for today. Does any other delegation wish to take the floor at this stage? This does not seem to be the case.

I should like now to deal with another matter. I have held consultations with the Groups in the light of the wishes expressed by States non-Members to attend the informal meeting scheduled for Tuesday, 10 July, in which Ambassadors Richard Burt of the United States and Yuri Nazarkin of the Soviet Union will participate in their capacities as Heads of the Delegations to the Strategic Arms Talks. As a result of my consultations, I understand that there is consensus that the informal meeting scheduled for that date be open to all non-Members wishing to attend who have already been invited to participate in various activities relating to the work of the Conference. This means that all States non-Members which now have nameplates and reserved

(The President)

seats in this conference room will be able to take part in that meeting. Of course, it is understood that this invitation is extended in view of the special character of the informal meeting being held on 10 July. I should like now to put this recommendation before the Conference for decision. Is there any objection? I see none.

It was so decided.

The Secretariat has circulated today a timetable of meetings to be held by the Conference and its subsidiary bodies next week. The timetable has been prepared in consultation with the chairman of subsidiary bodies. As usual, the timetable is merely indicative and can be changed if the need arises. I have in mind in that connection the consultations relating to an appropriate organizational framework for the consideration of agenda item 1, which might make it necessary for us to add to this timetable. If there is no objection, I shall take it that the Conference adopts it.

It was so decided.

Distinguished delegates, I am requested to announce that the open-ended consultations on radiological weapons scheduled for tomorrow, Friday, 6 July, at 3 p.m. will be held in room H-3, instead of Room I as originally envisaged.

I have no other business for today and I intend now to adjourn this plenary meeting. The next plenary meeting of the Conference on Disarmament will be held on Tuesday 10 July, at 10 a.m.

The plenary meeting stands adjourned.

The meeting rose at 10.35 a.m.